

## WHAT IS CLAIMED IS:

1. A magnetic disk drive comprising:
  - a magnetic disk;
  - a spindle motor for rotating said magnetic disk;
  - a magnetic head slider for recording or reproducing data onto or from said magnetic disk;
  - a housing;
  - a control circuit system for controlling said head slider so that said head slider is positioned on a magnetic disk plane when said magnetic disk is rotating, and said head slider is saved to outside the magnetic disk plane when rotation of said magnetic disk is stopped; and
  - a lubricant supply means for supplying lubricant to the surface of said magnetic disk;
  - wherein said lubricant supply means contains at least a perfluoropolyether compound having any one of an alcohol group, a cyclic ether group, and an alkyl-ester group at its terminal position as a lubricant, and said lubricant contains said perfluoropolyether compound having a molecular weight sufficient to enable lubrication and no greater than 4000.
2. A magnetic disk drive as claimed in claim 1, wherein said lubricant supply means is at least one of a suspension

applied with said lubricant and an arm applied with said lubricant.

3. A magnetic disk drive as claimed in claim 1, wherein said lubricant supply means includes a lubricant holding means for holding said lubricant.

4. A magnetic disk drive as claimed in claim 3, wherein said lubricant holding means is a filter impregnated with said perfluoropolyether compound by at least 0.5  $\mu$ -liter.

5. A magnetic disk drive as claimed in claim 3, wherein said lubricant holding means is a filter impregnated with said perfluoropolyether compound having any one of an alcohol group, a cyclic ether group, and an alkyl-ester group at its terminal position by at least 0.15  $\mu$ -liter, characterized in having scarce smears on a levitated plane of said magnetic head slider.

6. A magnetic disk drive as claimed in claim 1, wherein a lubricant film formed on said magnetic disk contains at least a perfluoropolyether compound having any one of an alcohol group, a cyclic ether group, and an alkyl-ester group at its terminal position.

7. A magnetic disk drive as claimed in claim 1, wherein the molecular weight of said perfluoropolyether compound which is sufficient to enable lubrication is at least 850.

8. A magnetic disk drive as claimed in claim 1, wherein the molecular weight of said perfluoropolyether compound which is sufficient to enable lubrication is at least 1000.

9. A magnetic disk drive comprising:  
a magnetic disk;  
a spindle motor for rotating said magnetic disk;  
a magnetic head slider for recording or reproducing data onto or from said magnetic disk;  
a housing;  
a control circuit system for controlling said head slider so that said head slider is positioned on a magnetic disk plane when said magnetic disk is rotating, and said head slider is saved to outside the magnetic disk plane when rotation of said magnetic disk is stopped; and  
a lubricant supply means for supplying lubricant to the surface of said magnetic disk;  
wherein said lubricant supply means contains at least a

perfluoropolyether compound having any one of an alcohol group, a cyclic ether group, and an alkyl-ester group at its terminal position as a lubricant, and said lubricant contains said perfluoropolyether compound having a molecular weight sufficient to enable lubrication and no greater than 4000 by at least 40%.

10. A magnetic disk drive as claimed in claim 9, wherein the molecular weight of said perfluoropolyether compound which is sufficient to enable lubrication is at least 850.

11. A magnetic disk drive as claimed in claim 9, wherein the molecular weight of said perfluoropolyether compound which is sufficient to enable lubrication is at least 1000.

12. A magnetic disk drive comprising:  
a magnetic disk;  
a spindle motor for rotating said magnetic disk;  
a magnetic head slider for recording or reproducing data onto or from said magnetic disk;  
a housing;  
a control circuit system for controlling said head slider so that said head slider is positioned on a magnetic disk plane when said magnetic disk is rotating and said head slider is

saved to outside the magnetic disk plane when rotation of said magnetic disk is stopped; and

a lubricant supply means for supplying lubricant to the surface of said magnetic disk;

wherein said lubricant supply means contains at least a perfluoropolyether compound having any one of an alcohol group, a cyclic ether group, and an alkyl-ester group at its terminal position as a lubricant, and said lubricant contains said perfluoropolyether compound having a molecular weight of at least 1000 and smaller than 4000 by at least 40%.